

ABSTRACT OF THE DISCLOSURE

Preparing for the full-fledged aged society, measures to prevent senility are required. Senility is prevented by extracting signals of prescribed bands from a speech signal using a first bandpass filter section having a plurality of bandpass filters, extracting the envelopes of each frequency band signal using an envelope extraction section having envelope extractors, applying a noise source signal to a second bandpass filter section having a plurality of bandpass filters and extracting noise signals corresponding to the prescribed bands, multiplying the outputs from the first bandpass filter section and the second bandpass filter section in a multiplication section, summing up the outputs from the multiplication section in an addition section to produce a Noise-Vocoded Speech Sound signal, and presenting the Noise-Vocoded Speech Sound signal for listening.